If not shown, please enter your 11-digit Census File Number from the address label on page 1

Census File Number

Item 17. CONSUMPTION OF SELECTED MATERIALS DURING 1997

INSTRUCTIONS

1. General – The materials, parts, and supplies listed below are those commonly consumed in the manufacture, processing, or assembly of the products listed in item 18B. Please review the entire list and report separately each item consumed. Leave blank if you do not consume the item. If you use materials, parts, and supplies which are not listed, describe and report them in the "Cost of all other materials . . . " line at the end of this section. If you consumed less than \$25,000 of a listed material, include the value with "Cost of all other materials . . . ," Census material code 970099 8.

Report materials, parts, and supplies purchased, transferred from other plants of your company, or withdrawn from inventory.

If the information as requested cannot be taken directly from your book records, REASONABLE ESTIMATES ARE ACCEPTABLE.

2. Valuation of Materials Consumed – The value of the materials, etc., consumed should be based on the delivered cost; i.e., the amount paid or payable after discounts and including freight and other direct charges incurred in acquiring the materials.

Materials received from other plants within your company should be reported at their full economic value (the value assigned by the shipping plant, plus the cost of freight and other handling charges).

If purchases or transfers do not differ significantly from the amounts actually put into production, you may report the cost of purchases or transfers. However, if consumption differs significantly from the amounts purchased or transferred, these amounts should be adjusted for changes in the materials and supplies inventories by adding the beginning inventory to the amount purchased or transferred and subtracting ending inventory.

- 3. Contract Work Include as materials consumed those you purchased for use by others making products for you under contract. Amounts paid to the companies doing the contract work should be reported in item 10, line e, and should include freight in and out. On the other hand, materials owned by others but used at this establishment in making products for others under contract or on commission should be excluded.
- 4. Resales Cost for products bought and sold or transferred from other establishments of your company and sold without further manufacture, processing, or assembly should be reported in item 10, line b, not in item 17 below. The value of these products shipped by this establishment should be reported in item 18B under Census product code 99989 00 6, "Resales."
- **5. Produced and Consumed –** Forgings, foundries, and screw machine products Report the quantities produced and used in manufacturing other products made in this establishment in item 19. Note that the materials used to produce these items should be reported in item 17.

Line No.		Census material code	Consumption of purchased materials and of materials received from other establishments of your company Cost, including delivery cost (freight-in) (E)				
		(B)	Millions	Thou- sands	Dollars		
1	FABRICATED METAL	Metal stamping	s	346901 2	\$	 	
2	PRODUCTS (Except forgings)		ws, rivets, washers, and screw machine products	345001 2	·	 	
3		All other fabrica	ited metal products	340093 4			
4	Forgings		346000 3		 		
5	CASTINGS (Rough and semi-	Iron and steel		332001 7		 	
6	finished)	Aluminum and	aluminum-base alloy	336005 4		 	
7		Other nonferrou	us castings	336003 9			
8	Shapes and Forms (Except	STEEL	Bars, bar shapes, and plates	331007 5			
9	castings, forgings, and		Sheet and strip	331022 4		 	
10	fabricated metal products)		Wire and wire products	331027 3		 	
11			All other steel shapes and forms	331019 0		 	
12		COPPER AND COPPER-BASE ALLOY	Bare wire (for electrical conduction only)	335728 2		 	
13		Rod, bar, and mechanical wire (including extruded and/or drawn shapes)		335102 0		 	
14		335170 7		 			
15	Aluminum and	aluminum-base a	335001 4				
	All other nonfer		335099 8				
17	Magnet wire		335770 4		 		

CONTINUE WITH ITEM 17 ON PAGE 6

It	Item 17. CONSUMPTION OF SELECTED MATERIALS DURING 1997 – Continued										
70.		Census material code		Consumption of purchased materials and of materials received from other establishments of your company Cost, including delivery cost (freight-in)							
Line No.					574	(E)	1				
Ë		571 (B))	Millions	Thou- sands	l Dollars					
18	Insulated coppe	33579	92 8	\$	 						
19	Primary alumin	33340	18		í I						
20	ENGINES	Diesel and semidiesel	35192	20 4		 					
21		Gasoline and other carburetor	35190)5 5		(
22	Fractional horse	epower electric motors less than 1 hp	36211	117		l I					
23	Integral horsepo	ower motors and generators (1 hp or more)	36212	20 8		 					
24	Ball and roller b	pearings (mounted or unmounted)	35620	00 6		 					
25	Plain bearings a	and bushings	35681	10 2		[[
26	Speed changers	s, gears, and industrial high-speed drives	35660)1 5] 					
27	Semiconductors	s, including transistors, diodes, rectifiers, and integrated circuits	36740	08 2		 					
28	Carbon brushes		36249	91 3		[
29	Ceramic magne	ts (ferrite)	32640)1 7		 					
30	Plastics products consumed in the form of sheets, rods, tubes, and other shapes										
31	Plastics resins of (excluding sheet)	282104 9			l I						
32	Paints, varnishe	s, lacquers, stains, shellacs, japans, enamels, and allied products	285101 2			 					
33	Electrical indust	rial capacitors, resistors, rheostats, and coil windings	36200	01 0		 					
34	Electrical transr	nission, distribution, and control equipment	36010	01 0		í I					
35	Paperboard box	res and containers and corrugated paperboard	26500)18		 					
36	consumed	materials and components, parts, containers, and supplies	97009	9 8] 					
	Describe the pr	incipal materials, etc., included in this value.									
			_			 	l I				
						! !] 				
						!	 				
			-				 				
			-			 	' 				
							i				
37	TOTAL Sum of lir	nes 1–36 should equal item 10, line a			\$	† 	 - -				
lt	18A – TYP	E OF ACTIVITY DURING 1997		Key	Ma Yes	rk (X)	No				
1	. Is this establishmotors owned	f	401								
2	. Is this establis	line 8; code 97694 10 3. hment primarily engaged in rebuilding, remanufacturing or rewinding a factory basis regardless of who owns the armature? If yes, report the	401		5710	5728					
	value of shipm		402	5736	5744						
3	motors on a fa appropriate pr (Rebuilt or ren reconstructed, damaged, defe	hment primarily engaged in rebuilding or remanufacturing complete electrictory basis? If yes, report the value of shipments for this activity in the oduct code on lines 1 through 7; codes 36211 00 1 through 36219 00 4. In an ufactured complete electric motors must have been dismantled and as necessary: all parts cleaned and made free from rust and corrosion; ective, worn, and missing parts restored or replaced; and other operations the essary to put the product in sound working condition.)	ic	403	5751	5769					

If not shown, please enter your 11-digit Census File Number from the address label on page 1

Census File Number

Item 18B. PRODUCTS AND SERVICES OF THIS ESTABLISHMENT DURING 1997

INSTRUCTIONS

 General - The manufactured products and services listed below are generally made in your industry. If you make products that are not listed, describe and report them in the "All other products made in this establishment" section at the end of item 18B. PLEASE DO NOT COMBINE PRODUCT LINES.

If quantities are requested, please use the unit of measure specified.

If the information as requested cannot be taken directly from your book records, REASONABLE ESTIMATES ARE ACCEPTABLE.

 Valuation of Products – Report the value of the products shipped and services performed at the net selling value, f.o.b. plant to the customer; i.e., after discounts and allowances, and exclusive of freight charges and excise taxes.

If you transfer products to other establishments within your company, you should assign the full economic value to the transferred products; i.e., include all direct costs of production and a reasonable proportion of all other costs and profits.

3. Contract Work - Report PRODUCTS MADE BY OTHERS FOR YOU FROM YOUR MATERIALS on the specific lines as if they were made in this establishment. On the other hand, do not report on the specific product lines

PRODUCTS THAT YOU MADE FROM MATERIALS OWNED BY OTHERS. Report only the amount that you received for "commission or contract receipts" under Census product code 93000 00 8.

- 4. Resales Do not report on the specific product lines those PRODUCTS BOUGHT AND SOLD OR TRANSFERRED FROM OTHER ESTABLISHMENTS OF YOUR COMPANY AND SOLD WITHOUT FURTHER MANUFACTURE. Report only a value under Census product code 99989 00 6, "Resales."
- 5. Detailed Data Reported Elsewhere Items denoted by an asterisk(*) require totals for groups of products covered in the more frequent Current Industrial Reports (CIR). If you report on the CIR forms, the sum of the detailed CIR products should equal the total reported on this census form. The Current Industrial Reports related to this report are as follows:
 - a. MA36H, Motors and Generators
 - b. MA35L, Internal Combustion Engines
 - c. MA36A, Switchgear, Switchboard Apparatus, and Industrial Controls
 - d. MA38B, Selected Instruments and Related Products

NOTE: Only CIR totals are requested; do not duplicate detail reported on the CIR.

	Products and services *Item corresponds to products reported on Current Industrial Reports (A)		Census	Corresponds to the sum of products reported for 1997 on –		Products shipped and other receipts			
e No.			product code			Value, f.o.b. plant (E)			
Line			581 (B-1)	CIR form (B-2)	Item code (B-3)	584 Millions	Thou-sands	l Dollars	
1	Fractional horse (excluding herm	36211 00 1		1015–2088, 2091, 2411–2416, 2418, 2430–2436, 2438, 2441, 2448, 2615–2645, 2647, 2841–2844, 2851–2855, 2860–2916, 4206, and 4314	\$	 			
2	Integral horsepower motors and generators other than for land transportation equipment (rated at 746 watts or more) (excluding hermetics) (36212)* Land transportation motors, generators, and control equipment (excluding parts – See line 7) (36213)* Prime mover generator sets (except steam or hydraulic turbine) (36214)*		36212 00 9		2089, 2092, 2417, 2419, 2437, 2439, 2449, 2646, 2648, 2845, 2856, 4204, 4208, 4315–4329, 4353–4396, and 4601–4604		 		
3			36213 00 7	MA36H	5310		 		
4			36214 00 5		7401–7475		 		
5	MOTOR- GENERATOR SETS AND OTHER ROTATING EQUIPMENT (Including hermetics)	Fractional (36217)* Integral (36218)*	36217 00 8 36218 00 6		8515, 8553–8563, and 8583 8513, 8530, 8540, 8565, and 8585		 		
7	and other rotation iobs; these shou	Parts and supplies for motors, generators, generator sets, and other rotating equipment (excluding motors for built-in jobs; these should be reported in the appropriate motor classification above) (36219)*		↓	8590, 8591, and 8595		 	 	
8	Custom repair s electric motors	hop rewinding of armatures or repairing	97694 10 3				 	 	
9	Rewinding armatures on a factory basis		76940 20 4				 		
10	Turbines, turbine generators, turbine generator sets, and parts		35110 00 6				 		
11	Gasoline and gas-gasoline engines (except aircraft, automobile, highway trucks, bus, tank, and outboard marine) (35191)*		35191 00 6	MA35L	9101–9207		 		
12	Diesel, semi-diesel, and dual-fuel engines (except automobile, highway trucks, bus, and tank) (35193)*		35193 00 2	↓	9331–9353		 		
13	Multistage blow	35643 29 5				 			
	Other centrifuga report these on					 			
14			35643 00 6			CONTINU	 		

It	Item 18B. PRODUCTS AND SERVICES OF THIS ESTABLISHMENT DURING 1997 - Continued									
		Census		onds to the sum	Products shipped and other receipts					
Line No.	Products and services *Item corresponds to products reported on Current Industrial Reports (A)		product code		997 on –	Value, f.o.b. plant (E)				
Line			581 (B-1)	CIR form (B-2)	Item code (B-3)	584 Millions	Thou- Sands Dollars			
15	Commercial, ins transformers, al excluding electr	36126 00 1			\$					
16	Power regulator (Including parts (36127)*	36127 00 9								
17	Low voltage par switching and ir (include higher	36133 00 7		3001–3201						
18	Switchgear (exc	ept ducts and relays) (36139)*	36139 00 4		5314–5361					
	RELAYS AND INDUSTRIAL	Relays for electronic circuitry, industrial control overload, and switchgear type (36251)*	36251 00 7	MA36A	5400-5496		1 1			
20	CONTROLS	Specific-purpose industrial controls (36252)*	36252 00 5		6101–6355					
21		General-purpose industrial controls (36253)*	36253 00 3		6402-6509					
22		Parts for industrial controls and motor- control accessories (36254)*	36254 00 1	↓	6703–6705					
23	CRANKING MOTORS (Starters)	Automotive types, new	36943 01 7							
24		Other types, new	36943 02 5							
25		Rebuilt, all types	36943 03 3				 			
26	Aeronautical, na systems and en	38121 00 0	↑ MA38B	4420–4518						
27	Process control Instruments		38230 00 9	↓	4612–4897					
	ALL OTHER PRODUCTS MADE IN THIS ESTABLISH- MENT	Describe and report separately each product with a sales value of \$50,000 or more which cannot be assigned to one of the lines above. For all remaining products, write "Other" and report a single total value.								
28			18							
29			26				<u> </u>			
30			34				1 1			
	CONTRACT WORK	Receipts for work done for others on their own materials	93000 00 8				1			
		Describe below products worked on and kind of work.								
32	MISCELLA- NEOUS RECEIPTS	Miscellaneous receipts (including receipts for research and developmental work, etc.)	99980 00 5							
33	RESALES	Sales of products bought and sold without further manufacture, processing, or assembly in this establishment. The cost of such items should be reported in item 10, line b.	99989 00 6							
		alue of shipments and other receipts								
34	Sum of lin	es 1–33, column (E)	77000 00 8			\$				

If not shown, please enter your 11-digit Census File Number from the address label on page 1

Census File Number

Item 19. SELECTED PRODUCTS PRODUCED IN THIS ESTABLISHMENT AND USED IN MANUFACTURING OTHER PRODUCTS MADE IN THIS ESTABLISHMENT

INSTRUCTIONS

- 1. Report below the quantity of each listed item produced in this establishment and used in manufacturing other products made in this establishment.
- **3.** Materials used to produce the items specified below should be reported in item 17.
- **4.** Quantities produced for sale as such and not for incorporation in other products should be reported in item 18B.

2. Purchases or receipts of the items specified below should be reported only in item 17.5. Report quantities in the unit of measure specified column (D).								cified in		
Line No.		5		Census code	Was this operation performed at this establishment during 1997? 592 (C) Yes No		Unit of measure for quantities	Quantities produced in this establishment and used in manufacturing other products made in this establishment		
	(A)							Short		
1	Ferrous foundri	es			1001 7	1 🗆	2	tons		
2	NONFERROUS FOUNDRIES (Except	Aluminum			1002 5	1	2	1 1		
3	die-casting)	Copper			1003 3	1	2			
4		Zinc			1004 1	1	2	Thousand pounds		
5		Other			1005 8	1	2			
6	Nonferrous die-	casting foundries			1006 6	1	2	1		
7	Precision turned centers, and CN	d products (on screw machines IC equipment)	s, turning		1007 4	1	2			
lt	ems 20 and 2	1 - Not applicable to this re	port							
N 667	Item 22. CERTIFICATION – This report is substantially accurate and has been prepared in accordance with instructions. Name of person to contact regarding this report (Print or type) Name of company Address (Number and street, city, State, ZIP Code)									
P		FROM: Month	Day	Year	TO:	Month	I	Day	Year	
	ignature of author		Titl	<u>. </u>	-			Da	nte	